

(19)



JAPANESE PATENT OFFICE

## PATENT ABSTRACTS OF JAPAN

(11) Publication number: 2003078484 A

(43) Date of publication of application: 14.03.2003

(51) Int. Cl H04B 7/26

H04B 1/04, H04J 13/00

(21) Application number: 2001266646

(71) Applicant: TOSHIBA CORP

(22) Date of filing: 04.09.2001

(72) Inventor: MITSUKI ATSUSHI

### (54) RADIO DEVICE

(57) Abstract:

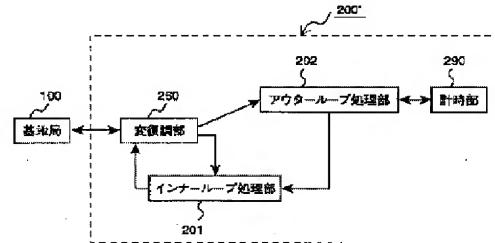
**PROBLEM TO BE SOLVED:** To solve the problem that when downlink sending power control is performed, interference electric power to circumferential cells needs to be suppressed and the time up to convergence after the start of the power transmission control needs to be shortened.

**SOLUTION:** A radio device has a modulation and demodulation part (260) which modulates a sending power control signal for controlling sending power to an opposite side and demodulates a power-controlled signal from the opposite side, an inner loop (201) which estimates SIR of the demodulated signal in each 1st period of the demodulated signal, compares the estimated SIR with a threshold, and generates and outputs the sending power control signal to the modulation and demodulation part, a timer part (290) which clocks a specific time after the sending power control signal begins to be sent to the opposite side, and an outer loop (202) which updates the threshold in every 2nd period of the demodulated signal longer than the

1st period; and the outer loop performs the updating process after the lapse of the specific time.

COPYRIGHT: (C)2003,JPO

(a)



(b)

